3. In a fuel heating and heat regulating device for a fuel feed system of an internal combustion engine, a bowl-shaped fuel chamber having inlet and outlet connections, a 5 heating chamber arranged about a portion of the fuel chamber, said heating chamber being provided with inlet and outlet connections, a sealed chambered member forming a closure for the said fuel chamber, a volatile fluid within said chambered member, a flexible diaphragm forming a part of said chambered member, and mechanism connected with said diaphragm for controlling the supply of heating medium to the heating 15 chamber.

4. In a fuel heating and heat regulating device for an internal combustion engine, a bowl-shaped fuel chamber having inlet and outlet connections, a heating chamber surrounding a portion of said fuel chamber, : said heating chamber having inlet and outlet connections for a heating medium, a sealed chambered member forming a closure for the said fuel chamber, a volatile fluid within said chambered member, a flexible dia-25 phragm forming a part of said chambered member, a valve in the connection leading to the heating chamber, and lever mechanism connected with the said diaphragm for actuating the valve.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

JOSEPH A. WILLIAMS.

Witnesses:

H. R. SULLIVAN, A. F. Kwis.